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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/497,774	02/03/2000	Edith H. Stern	BC9-99-059	7893

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EXAMINER

LAFORGIA, CHRISTIAN A

ART UNIT	PAPER NUMBER
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2131

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/497,774

Applicant(s)

STERN ET AL.

Examiner

Christian La Forgia

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.
2. Claims 1-48 have been presented for examination.
3. Claims 15, 16, 20, and 42-46 have been cancelled as per Applicant's request.

Response to Arguments

4. Applicant's arguments with respect to claims 1-48 have been considered but are moot in view of the new ground(s) of rejection.
5. See further rejections that follow.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. The term "substantially" in claims 25-32 is a relative term which renders the claim indefinite. The term "substantially" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. See MPEP 2173.05(b). See *In re Nehrenberg*, 280 F.2d 161, 126 USPQ 383 (CCPA 1960).

Claim Rejections

8. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
9. Claims 1-14, 17-19, 21-41, 47, and 48 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,209,024 to Armstrong et al., hereinafter Armstrong.

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10. As per claims 1 and 33, Armstrong teaches a system for transmitting data in a data stream to grouped recipients, comprising:

a server, for receiving users' requests for transmission of user requested data in a data flow for reception by said users (Figures 1 [block 106], 2 [block 208] column 3, lines 47-63, column 4, lines 34-43, i.e. distribution center process commands received from a plurality of users);

the server, independent of said user requests for data and while preserving the impression to individual users requesting data that each is being immediately served with requested data, for arranging the users in at least one group of recipients of a respective data stream of the at least one data stream, with each user being arranged in a respective group of the at least one group, and wherein each respective group for receiving said user requested data in said respective data stream corresponding to a point of transmission of said data flow (Figures 5, 6, column 4, lines 23-34, column 9, lines 1-63, i.e. a user is assigned to an output user group, and potentially to a disk access group); and

the server, responsive to the arrangement of the users in said at least one group, for transmitting said user requested data in said respective data stream to each said respective group (column 8, lines 27-48, i.e. information is sent from the disks to the user's network);

wherein the server for realigning a respective user from a first respective group corresponding to receiving user requested data at a first location in the respective data stream to a second respective group corresponding to receiving user requested data at a second location in the data stream, the second location being selected by the server, independent of said user requests for data, to change the location in the data stream the respective user is receiving user

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requested data to any location in the data stream other than the first location in the data stream (Figure 7, column 10, line 53 to column 11, line 40).

11. Regarding claims 2 and 37, Armstrong teaches wherein, the server realigns a respective user with said respective data stream to change the relative position of the respective user to the data being transmitted in said respective data stream, responsive to a signal from the respective user (Figure 7, column 10, line 53 to column 11, line 40).

12. Regarding claims 3, 26, and 38, Armstrong teaches wherein, the server arranges the users into the groups arranged by the size of the group (column 10, lines 29-46).

13. Regarding claims 4, 27, and 39, Armstrong teaches wherein, the server arranges the users into the groups arranged by a time interval for assembling the group (column 10 line 66 to column 11, line 14, i.e. grouping users by the time interval they requested the data to start playback).

14. Regarding claims 5, 28, and 34, Armstrong teaches wherein, the server is limited to a maximum number of the groups; and wherein said server arranges the groups in relation to the maximum number (column 10, lines 29-46).

15. Regarding claims 6, 7, 29, 30, 35, and 36, Armstrong teaches wherein, the telecommunications medium is the Internet and the user's requests are received from a World Wide Web browser (column 3, lines 54-63).

16. Regarding claims 8 and 40, Armstrong teaches wherein, the data is transmitted with identifiable locations in the data stream; the server identifying a respective identifiable location in the data stream corresponding to the request; and the server, moving the respective user to another of the groups receiving the data stream from another location in the data stream related to the respective identifiable location (column 3, line 38, column 10, line 66 to column 11, line 14). It is known that MPEG-2 is transported with identifiable locations in the data streams.

17. With regards to claims 9, 10, and 18, Armstrong teaches wherein, the related location is advanced/delay in time of transmission of the data stream relative to the respective identifiable location (column 4, lines 56-63, column 10, line 53 to column 14, line 14).

18. With regards to claims 11-14, Armstrong discloses wherein, the server has a plurality of ports and with each the group connected to a respective port for receiving the data stream from separate respective locations in the data stream through a respective port; and the server, moving the user to a the separate respective location in the data stream by reconnecting the user to another of the respective ports (Figures 2, 3, column 5, line 51 to column 6, line 39).

19. Regarding claim 17, Armstrong teaches means for signaling connected to the users for sending discrete respective signals to the server; the server, responsive to the discrete respective signals, realigning a respective user with the data stream to change the relative position of the respective user to the data being transmitted in the data stream; and wherein, the realignment is

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in discrete steps relative to position of the respective user to the data being transmitted in the data stream (column 10, line 53 to column 11, line 14).

20. Regarding claim 19, Armstrong teaches wherein, the discrete respective signals include signals for realignment in discrete intervals (column 10, line 53 to column 11, line 14).

21. Regarding claim 21, Armstrong teaches wherein the discrete intervals are intervals of space displacement in the location of the data in the data stream (column 10, line 53 to column 11, line 14).

22. Concerning claim 22, Armstrong teaches wherein, the server includes means for disconnecting a respective user with said respective data stream at an identifiable location in said respective data stream and for reconnecting the user to another data stream of the at least one data stream (column 10, line 53 to column 11, line 14).

23. With regards to claim 23, Armstrong teaches wherein, the server includes means for disconnecting the respective user with another data stream after a discrete interval and reconnecting the user with the data stream at the identifiable location (column 10, line 53 to column 11, line 14).

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24. Concerning claim 24, Armstrong teaches wherein, the server means for reconnecting the user with the data stream is a pointer for accessing data in the data store at discrete locations (Figures 4, 5, 8, 9, 10, column 10, line 53 to column 11, line 14).

25. As per claims 25 and 47, Armstrong discloses a system comprising:

a server for transmitting user requested data in a data flow for reception by a plurality of users requesting said data at substantially the same time (Figures 1 [block 106], 2 [block 208] column 3, lines 47-63, column 4, lines 34-43, i.e. distribution center process commands received from a plurality of users);

the server having means for connecting the server to a telecommunications network for the transmission of data (Figure 1 [block 106], column 3, lines 47-63); and

the server including means for responding to user requests for data, said user requests being received from the telecommunications network, for identifying the individual requesters as the source of respective user requests for data and arranging the individual requesters in respective groups for receiving said user requested data in a data stream (Figures 5, 6, column 4, lines 23-34, column 9, lines 1-63, i.e. a user is assigned to an output user group, and potentially to a disk access group), and

wherein said server, independent of said user requests for data and while preserving the impression to individual users requesting data that each is being immediately served with requested data, arranging said individual requesters in each of said respective groups for reception of said user requested data in said respective data stream corresponding to a point of transmission of said data flow by time of request or by number of requests, for transmission of

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the same user requested data in said respective data stream to the respective users in respective groups, and for distributing the user load on said server and shifting said user load toward a steady state load on the server by distributing said respective groups over the transmission of said data flow by time of data stream transmission or by place in said data flow transmission (Figures 5-7, column 4, lines 23-34, column 9, lines 1-66, column 10, line 53 to column 11, line 40).

26. With regards to claim 31, Armstrong teaches wherein the server includes means for shifting the respective individual requesters between the groups to change the time of reception of said user requested data relative to the data stream transmission (column 10, lines 53 to column 11, line 40).

27. With regards to claim 32, Armstrong teaches wherein, said user requested data is accessed from a data store communicatively coupled to the server (Figure 2 [block 202], column 4, line 62 to column 5, line 7);

the server includes means for changing the location in the data store accessed for shifting the location of the user requested data relative to the data flow transmission (Figures 2 [block 202], 7, 8, column 4, line 62 to column 5, line 7, column 10, line 63 to column 11, line 27).

28. As per claim 41, Armstrong teaches a system for transmitting data in a data stream sent from a server to a plurality of users requesting access to the data stream at substantially the same time, a method comprising the steps of,

sending at least one data stream from a server to a plurality of users that requested data from the server (column 3, line 64 to column 4, line 23, column 8, lines 57-67);

arranging, independent of said user requests for data and while preserving the impression to individual users requesting data that each is being immediately served with requested data, said plurality of users into groups, comprising a first group and a second group, each of said groups for reception of a respective data stream transmitted from the server, each respective data stream corresponding to reception of user requested data at a point of transmission of said data flow (Figures 5, 6, column 4, lines 23-34, column 9, lines 1-63, i.e. a user is assigned to an output user group, and potentially to a disk access group);

moving, independent of said user requests for data, one of the plurality of users from said first group to said second group for reception, by said one of the plurality of users, of user requested data at a point of said data flow relatively displaced in space or time from reception by said first group (Figure 7, column 10, line 53 to column 11, line 40).

29. As per claim 48, Armstrong teaches a system for transmitting data in a data stream to grouped recipients, comprising:

a server, for receiving users' requests for transmission of user requested data in a data flow for reception by said users (Figures 1 [block 106], 2 [block 208] column 3, lines 47-63, column 4, lines 34-43, i.e. distribution center process commands received from a plurality of users);

said server, independent of said user requests for data and while preserving the impression to individual users requesting data that each is being immediately served with

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requested data, for arranging said users in at least one group of recipients of a respective data stream of the at least one data stream, with each user being arranged in a respective group of the at least one group, and wherein each respective group for receiving said user requested data in said respective data stream corresponding to a point of transmission of said data flow (Figures 5, 6, column 4, lines 23-34, column 9, lines 1-63, i.e. a user is assigned to an output user group, and potentially to a disk access group);

said server, responsive to the arrangement of said users in said at least one group, for transmitting said user requested data in said respective data stream to each said respective group, and wherein the server for realigning a respective user (column 8, lines 27-48, i.e. information is sent from the disks to the user's network);

from a first respective group corresponding to said respective user receiving user requested data being transmitted at a first location in the data flow at a first point in time (Figure 7, column 10, line 53 to column 11, line 40);

to a second respective group corresponding to said respective user receiving transmission of said user requested data being transmitted at the first location in the data flow at a second point in time, the second point in time being selected by the server, independent of said user requests for data, to change the relative time the respective user is receiving the transmission of said user requested data being transmitted at the first location in the data flow (Figure 7, column 10, line 53 to column 11, line 40).

Conclusion

30. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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31. The following patents are cited to further show the state of the art with respect to streaming video systems, such as:

United States Patent No. 5,561,637 to Dan et al., which is cited to show controlling transmission of a data stream by a server to a plurality of clients in a multicast group.

United States Patent No. 6,378,036 to Lerman et al., which is cited to show scheduling disk drive access requests in a video server.

United States Patent No. 6,212,657 to Wang et al., which is cited to show delivering a plurality of video streams on user demand and under user control.

United States Patent No. 5,928,327 to Wang et al., which is cited to show delivering a plurality of video streams on user demand and under user control.

United States Patent No. 6,691,208 to Dandrea et al., which is cited to show scheduling disk drive access requests in a video server.

United States Patent No. 5,592,612 to Birk, which is cited to show a streaming server that prevents congestion problems from persisting, reduces buffering requirements, and provides load balancing and fault tolerance.

United States Patent No. 5,938,734 to Yao et al., which is cited to show a real time stream server capable of realizing a supply of a plurality of real time stream data with different rates by a scheduling scheme.

United States Patent No. 5,532,937 to Graziano et al, which is cited to show switching multimedia data streams in response to requests to allocate or de-allocate a user on a network receiving those data streams.

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32. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christian La Forgia whose telephone number is (571) 272-3792.

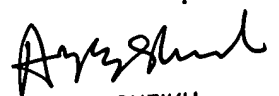
The examiner can normally be reached on Monday thru Thursday 7-5.

33. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

34. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christian LaForgia
Patent Examiner
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